

CLAIMS

What is claimed is:

1. A nail lockout assembly for use with a nail gun, comprising:
 - a slotted guide member for engaging a projection disposed in a nail loading assembly of the nail gun and for identifying the angle of coupling of the nail loading assembly to a nail driving assembly of the nail gun;
 - a linkage bar coupled with the slotted guide member, the linkage bar for translating the movement of the slotted guide member;
 - a pusher coupled with the linkage bar, the pusher for engaging a nail and translating the alignment of the nail, by rotation of the pusher, to the linkage bar;
 - a pawl assembly coupled with the linkage bar, the pawl assembly for rotating into a first or a second position based on the position of the linkage bar;
 - an adapter coupled with the pusher and the pawl assembly, the adapter for enabling the rotational movement of the pusher and the pawl assembly; and
 - a cover serrated member disposed on a cover of the nail loading assembly, the cover serrated member for engaging the pawl assembly in a second position,wherein the pawl assembly engages with the cover serrated member and prevents the cover from closing and the nail from advancing when the nail, based on the angle of coupling of the nail loading assembly to the nail driving assembly, is improperly aligned with the pusher assembly.
2. The nail lockout assembly of claim 1, wherein the nail loading assembly is an adjustable angle magazine.
3. The nail lockout assembly of claim 2, wherein the adjustable angle magazine further comprises a universal adapter assembly.
4. The nail lockout assembly of claim 2, wherein the adjustable angle magazine

further comprises a pick-off pivot assembly.

5. The nail lockout assembly of claim 2, wherein the adjustable angle magazine further comprises a nail shank pawl assembly.
6. The nail lockout assembly of claim 1, wherein the adjustable angle magazine is enabled as a top-load or side-load magazine.
7. The nail lockout assembly of claim 1, wherein the nail gun is selected from the group consisting of a spring-loaded nail gun, a pneumatic nail gun, an electro-magnetic nail gun, a combustion nail gun, and a motor driven nail gun.
8. The nail lockout assembly of claim 1, wherein the nail gun further comprises a clutch assembly.

9. An adjustable angle magazine for use with a nail gun, comprising:
 - a housing including a first end and a second end, the housing is coupled with a cover, the housing for storing and providing a nail to a nail driving assembly of the nail gun;
 - an adjustment assembly disposed proximal to the second end of the housing, the adjustment assembly for affixing the position of the housing relative to the nail gun;
 - a universal adapter assembly coupled with the first end of the housing, the universal adapter assembly for pivotally coupling with the nail driving assembly;
 - a nail lockout assembly disposed upon the housing, the nail lockout assembly for engaging the nail in the housing,
 - wherein the nail lockout assembly determines whether the nail is properly positioned and prevents the advancement of the nail if it is improperly positioned.
10. The adjustable angle magazine of claim 9, further comprising a pick-off pivot assembly.
11. The adjustable angle magazine of claim 9, further comprising a nail shank pawl assembly.
12. The adjustable angle magazine of claim 9, wherein the adjustable angle magazine is enabled as a top-load or a side-load magazine.
13. The adjustable angle magazine of claim 9, wherein the nail gun is selected from the group consisting of a spring-loaded nail gun, a pneumatic nail gun, an electro-magnetic nail gun, a combustion nail gun, and a motor driven nail gun.
14. The adjustable angle magazine of claim 9, wherein the nail gun further comprises a clutch assembly.

15. An adjustable angle nail gun, comprising:
 - a handle including a first end and a second end, the second end coupled with a fastening assembly;
 - a nail driving assembly coupled with the first end of the handle, the nail driving assembly including a driver blade, the nail driving assembly for driving a nail;
 - an adjustable angle nose casting assembly coupled with the nail driving assembly, the adjustable angle nose casting assembly for receiving the nail and enabling the operation engagement of the driver blade with the nail;
 - an adjustable angle magazine including a first end coupled with a universal adapter assembly for pivotally coupling with the adjustable angle nose casting assembly and an adjustment assembly disposed proximal to a second end of the adjustable angle magazine, the adjustment assembly for coupling with the fastening assembly, the adjustable angle magazine for storing and providing the nail to the adjustable angle nose casting assembly; and
 - a nail lockout assembly disposed upon the adjustable angle magazine, the nail lockout assembly for engaging the nail in the adjustable angle magazine,
 - wherein the nail lockout assembly determines whether the nail is properly positioned and prevents the advancement of the nail if it is improperly positioned.
16. The adjustable angle nail gun of claim 15, wherein the adjustable angle magazine further comprises a pick-off pivot assembly.
17. The adjustable angle nail gun of claim 15, wherein the adjustable angle magazine further comprises a nail shank pawl assembly.
18. The adjustable angle nail gun of claim 15, wherein the adjustable angle magazine is enabled as a top-load or a side-load magazine.

19. The adjustable angle nail gun of claim 15, wherein the adjustable angle nail gun is selected from the group consisting of a spring-loaded nail gun, a pneumatic nail gun, an electro-magnetic nail gun, a combustion nail gun, and a motor driven nail gun.
20. The adjustable angle nail gun of claim 15, wherein the adjustable angle nail gun further comprises a clutch assembly.

21. A nail loading assembly for use with a nail gun, comprising: /
 means for engaging a nail within a nail loading assembly; and
 means for determining whether the correct nail has been loaded into the nail loading assembly, coupled with the engaging means.
22. The nail loading assembly of claim 21, wherein the means for engaging a nail is a pusher.
23. The nail loading assembly of claim 21, wherein the means for determining whether the correct nail has been loaded is a nail lockout assembly disposed within the nail loading assembly and operationally coupled with the pusher.
24. The nail loading assembly of claim 21, wherein the nail loading assembly is an adjustable angle magazine.
25. The nail loading assembly of claim 24, wherein the adjustable angle magazine further comprises a pick-off pivot assembly.
26. The nail loading assembly of claim 24, wherein the adjustable angle magazine further comprises a nail shank pawl assembly.
27. The nail loading assembly of claim 24, wherein the adjustable angle magazine is enabled as a top-load or a side-load magazine.
28. The nail loading assembly of claim 21, wherein the nail gun is selected from the group consisting of a spring-loaded nail gun, a pneumatic nail gun, an electro-magnetic nail gun, a combustion nail gun, and a motor driven nail gun.

29. The nail loading assembly of claim 21, wherein the nail gun further comprises a clutch assembly.

30. A method of using a nail gun, comprising:
loading a collated nail strip into a nail loading assembly coupled with a nail driving assembly of the nail gun;
engaging the collated nail strip with a nail lockout assembly disposed upon the nail loading assembly; and
determining if the collated nail strip provides nails in the correct position for use by the nail gun,
wherein the nail lockout assembly allows the collated nail strip to advance when the nails are determined to be correctly positioned for use by the nail gun.
31. The method of claim 30, wherein the nail loading assembly is an adjustable angle magazine.
32. The method of claim 31, wherein the adjustable angle magazine further comprises a pick-off pivot assembly.
33. The method of claim 31, wherein the adjustable angle magazine further comprises a nail shank pawl assembly.
34. The method of claim 31, wherein the adjustable angle magazine is enabled as a top-load or a side-load magazine.
35. The method of claim 30, wherein the nail gun is selected from the group consisting of a spring-loaded nail gun, a pneumatic nail gun, an electro-magnetic nail gun, a combustion nail gun, and a motor driven nail gun.
36. The method of claim 30, wherein the nail gun further comprises a clutch assembly.